

# Hitachi Group Corporate Sustainability Report 2010 Digest



2010



**Takashi Kawamura**  
Chairman  
Hitachi, Ltd.

## A Message from Management

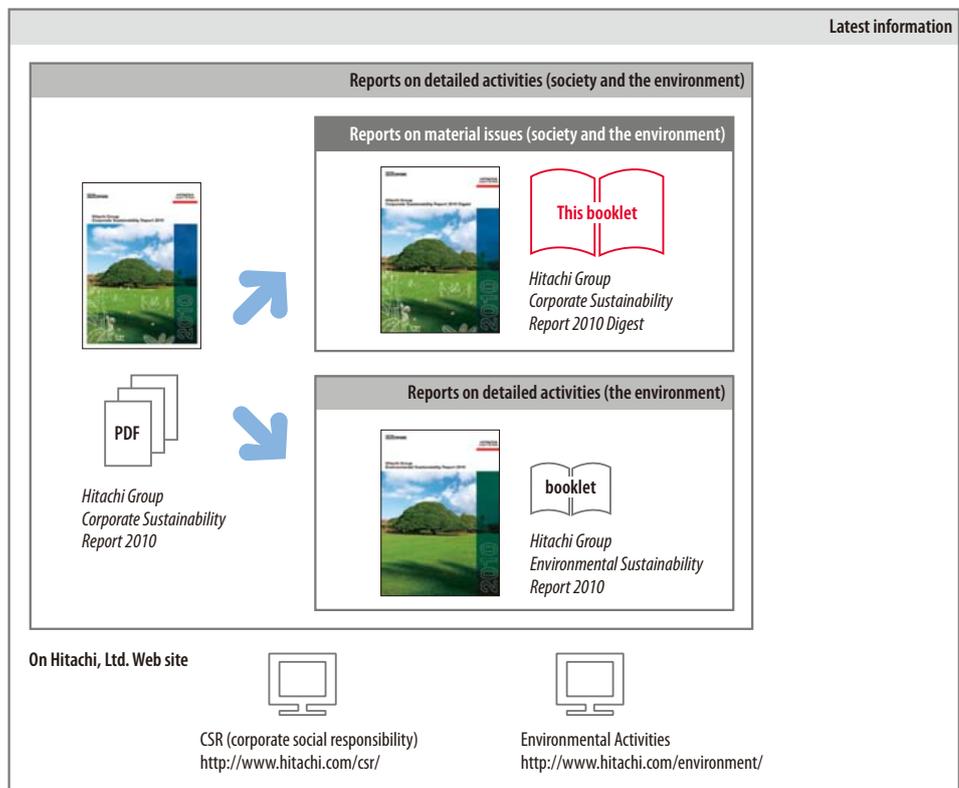
At Hitachi, Ltd., we celebrate our centennial in 2010. On behalf of the Hitachi Group, I would like to express my gratitude to all who have supported us over the years. The Company started out by championing the cause of Japanese technology at the Hitachi Mine. We have adhered to our founding concepts of harmony, sincerity and pioneering spirit to overcome various adversities and to contribute to social progress. In response to serious issues, such as climate change and the financial crisis, the world has been working to establish new approaches in every field. We will remain true to our roots over the next century by renewing our determination to continue evolving as a company that can contribute to a better world.

The business climate has been extremely tough for Hitachi in recent years. We took immediate steps to overcome these challenges in fiscal 2009, notably by improving our cost structure, by slashing fixed expenses, and by increasing our capitalization to reinforce our financial position. At the same time, we made social innovation our operational focus. We are therefore overhauling our business portfolio, including the integration of the information and telecommunications operations with the power and electronics operations.

We will pursue sustainable growth in fiscal 2010, shifting to the offensive from our current defensive approach, and I will strive with our new president to decisively accelerate our global expansion. With our motto “moving into the next 100 years with reliable technology,” we aim to be the company of choice for social innovation solutions throughout the world.

We will redouble our commitment to all our stakeholders—from customers and business partners to shareholders and other investors, non-governmental organizations, and communities—in fulfilling our social responsibilities as a global enterprise. We look forward to your ongoing support and encouragement for these endeavors.

### CSR Activity Reporting Policy



The Hitachi Group gathers and discloses issues relating to CSR activities that might interest readers. We issue the *Hitachi Group Corporate Sustainability Report 2010 Digest* to present crucial management issues that are of particular social interest; the *Hitachi Group Corporate Sustainability Report 2010* (PDF), which offers more detailed information; and the *Hitachi Group Environmental Sustainability Report 2010*, for stakeholders tracking our environmental activities. We also disclose the latest information on our Web site.

## Items Included Only in the Hitachi Group Corporate Sustainability Report 2010 (PDF)

The following items can be viewed on the Web site:  
<http://www.hitachi.com/csr/download/>

### CSR Management at Hitachi

Corporate Governance / CSR Promotion Activities / Compliance and Risk Management

### Living Together with Society

Improving *Monozukuri* and Service / Communication with Shareholders and Investors / Social Contribution Activities / Collaboration with Suppliers / Employees: The Key to Hitachi's Future

### Hitachi's Environmental Conservation

Message from the Chief Environmental Strategy Officer / Hitachi Group Corporate Environmental Management / Contributing to Environmental Conservation through Business / Environmental Action Plan / Eco-Mind & Global Environmental Management / Next-Generation Products & Services / Super Eco-Factories & Offices / Worldwide Environmental Partnerships / Independent Review

### Comparative Table with GRI Guidelines

#### Initiatives That We Participate in

We have been a member of the United Nations Global Compact since February 2009.



We have been a member of the World Business Council for Sustainable Development since 1995.



World Business Council for Sustainable Development

#### External Evaluations

We were selected in September 2009 for the Dow Jones Sustainability World Indexes (DJSI World), one of the world's leading sustainability investment fund indexes. We were also awarded the Silver Class in the Sustainable Asset Management (SAM) *Sustainability Yearbook 2010*.



#### Scope of Reporting

##### [Period]

The main period covered is fiscal 2009 (April 1, 2009 through March 31, 2010)

##### [Companies]

Hitachi, Ltd. and 900 consolidated subsidiaries (including modified entities to which the equity method of consolidated reporting applies): total 901 companies

##### [Scope of data]

**Financial data** Hitachi, Ltd. and 900 consolidated subsidiaries (including modified entities to which the equity method of consolidated reporting applies) and

157 affiliated companies that use the equity method

**Social data** Scope of data indicated under each item

**Environmental data** Hitachi, Ltd. and 900 consolidated subsidiaries (including modified entities to which the equity method of consolidated reporting applies): total 901 companies. However, for environmental load data generated through business operations, companies that cover 90% of the load (based on Hitachi calculations)

#### Related Reports

We report on the financial performance of Hitachi, Ltd. in the "Financial Highlights" and Annual Report.

#### Guidelines Referred to in Preparing This Report

"Environmental Reporting Guidelines" (FY 2007 version), Ministry of the Environment, Japan

"Environmental Reporting Guidelines 2001—With Focus on Stakeholders," Ministry of Economy, Trade and Industry, Japan

GRI Sustainability Reporting Guidelines (G3), Global Reporting Initiative

\*This CSR report is published annually.

## Contents

2 Top Dialogue

## CSR Management at Hitachi

4 CSR at Hitachi

6 Ensuring Strict Compliance

## Social Innovation Business Contributions

8 Hitachi's Worldwide Reach

10 Supplying Advanced Railway Systems to the World

12 Fusing Technologies to Create Smart Energy Solutions

14 Improving Lives One Person at a Time

## Living Together with Society

16 Procurement, the Supply Chain, and Respect for Human Rights

Raising Awareness of Human Rights / Collaboration with Suppliers

18 Providing Supportive and Diverse Workplaces

Diversity Embodies Our Respect for Individuality / Employing People with Disabilities / Work-Life Balance

## Hitachi's Environmental Conservation

20 Environmental Management toward a Sustainable Society

Hitachi's Environmental Vision / Achieving Environmental Vision 2025 / Prevention of Global Warming / Conservation of Resources / Preservation of Ecosystem

## A Century of Service Articles

16 Helping Rebuild Tokyo after the Great Kanto Earthquake

18 Cultivating People since Our Inception

20 Pioneering Effort in Environmental Conservation

24 Company Profile

Economic Performance

Major Fields of Business and Products

#### Symbol Marks Used in This Booklet

† Technical terms, proper nouns, etc., in the text requiring explanation

\* Additional explanation of terms, etc., in tables or diagrams

 Full texts of policies or guidelines, details of activities, numerical data, etc., are included in the *Hitachi Group Corporate Sustainability Report 2010* (PDF)

 Indicates the title and URL of the Web page related to the article

# Harnessing Comprehensive Strengths to Contribute to Environmental and Social Progress as a Truly Global Enterprise

**Hiroaki Nakanishi**, *President, Hitachi, Ltd.*

**Aron Cramer**, *President and CEO, Business for Social Responsibility (BSR)*

## BSR

Headquartered in the United States, BSR has been a leader in CSR since 1992. It serves a network of more than 250 companies around the world from offices in Asia, Europe, and America, and advises companies on their CSR management and the development of sustainable business strategies and solutions.

**Cramer:** How are you positioning Hitachi for success in the context of a stagnating global economy?

**Nakanishi:** Since 1910, Hitachi has grown and contributed to human progress by meeting society's needs through technology and innovation, and we will remain firmly committed to that approach. Today, our world is changing dramatically, driven by events



that have become increasingly important on a global scale. I think we can overcome or mitigate challenges such as climate change through alliances and multilateral approaches. Public and private partnerships that leverage knowledge-based and technology-based business innovation are crucial. That is where Hitachi can add real value, by providing truly innovative social and environmental solutions that address fundamental global issues. To that end, Hitachi can support sustainable economic development and human progress across countries through total system solutions, or what we're calling Social Innovation. To improve lifestyles and stability, we must work with government and society to create a safe, secure, and environmentally sustainable social infrastructure. I believe Hitachi will be one of the most trusted and important companies of this decade and beyond because we are now poised to play a tremendous role in helping countries become more sustainable through Social Innovation. But it is important for our employees to capitalize on these opportunities by clearly understanding what society needs from us, and then we must tackle those issues and engage in a Group-wide effort to deliver on society's requirements that benefit both Hitachi and society.

**Cramer:** Does that mean it's important for your engineers to consider social acceptance when pursuing technological development?

**Nakanishi:** Exactly. But this goes beyond engineers. All Hitachi employees play a role and should share the same

awareness. If we look at the social infrastructure of emerging countries, where markets and customer needs are incredibly diverse, our engineers must identify needs with those considerations in mind and develop technologies that win social acceptance. On top of that, our sales and planning people must operate on the frontlines to relay their understanding of what society expects and needs. These attitudes and actions will be vital for our growth.

## Optimizing the Global Social Infrastructure

**Cramer:** Hitachi will celebrate its centennial this year. What lessons from your history are most relevant for the future?

**Nakanishi:** Our founder, Namihei Odaira, was determined to help drive social progress by taking it upon himself to revive a struggling Japanese industry and outdated economy. His philosophy was to contribute to society through innovative technologies and product development. Hitachi overcame numerous challenges early on through adaptive leadership that enhanced technologies and quality, cultivated human resources, demanded high ethical standards, and improved market and customer trust. We have much to learn from such leadership behavior.

**Cramer:** The world must tackle the challenges of securing energy and water resources. How can Hitachi help resolve these issues?

**Nakanishi:** As a Social Innovation Business the environment is an essential platform for all our operations and thinking. We have accumulated a diverse portfolio of environmental technologies for creating smarter, more sustainable equipment and systems in everything from power to transportation to water systems. Our greatest strength is that we can deliver comprehensive solutions for the entire social infrastructure. Take Tokyo, for example, where natural resources are limited but energy and water demand is high, Hitachi has





played a leading role to optimize the social infrastructure of the city so that it is smarter and more sustainable. As I look out globally, the opportunities have increased greatly for us to help governments fulfill their missions of accomplishing economic growth while safeguarding the environment and supporting healthy lifestyles. We can thus optimize societies as a whole to be more sustainable, and that is Hitachi's real strength and differentiating value.

**Cramer:** Considering the nature of the sustainability challenge, it sounds like social optimization will become increasingly important.

### Employing Borderless Partnerships to Drive Dynamic Global Management

**Cramer:** What challenges does Hitachi face in promoting globalization?

**Nakanishi:** At Hitachi, all employees need to understand that we seek resources internationally to serve the needs of the world marketplace. We want them to remain aware that our markets are global and to refine their skills. Our employees must identify the true needs of our customers from a global perspective and meet those needs to satisfy expectations locally. It is critical for us, where needed, to form government and regional partnerships to undertake projects that create sustainable economic development supported by Hitachi innovation. However, borders between countries and industries are eroding, so we can only succeed if our employees improve their skills to work in the global economy, while we, as a business, partner with governments

and build borderless alliances.

**Cramer:** At the same time, it will become important to globalize the mindsets of decision makers at headquarters.

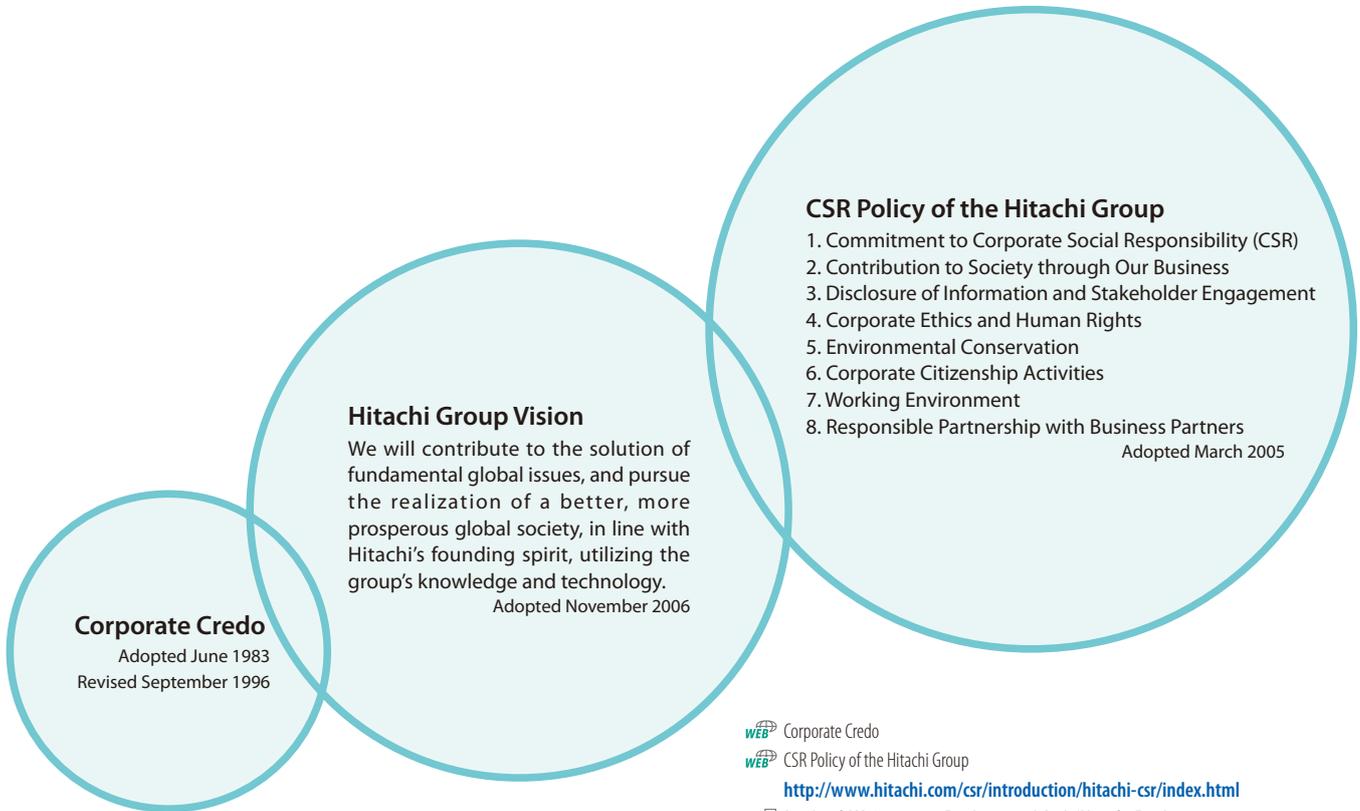
**Nakanishi:** Certainly. To become a global company, we need globally minded leaders. One of my missions is indeed to reform the mindsets of senior executives. Management diversity is a key factor for Hitachi's success. To be global, we must think locally at the market level and reflect global perspectives at headquarters. When you operate globally you have to empower those closer to the customer or market to make swift decisions. So our business "control towers" need to be near our markets. Also, headquarters must become global through the diversity of people and ideas. By getting top managers of businesses to focus more on markets, while headquarters becomes more global through diverse people and perspectives, we will operate more dynamically worldwide.

**Cramer:** I agree. Lastly, what role do you think CSR will play in helping Hitachi to achieve further success?

**Nakanishi:** I think that CSR is the foundation of global operations. CSR relates directly to the course we ought to take in serving social needs and cultivating the markets through which we deliver the products and services that customers want. It is important for top managers in each business unit to properly understand the regionally specific values and needs of Hitachi's stakeholders, then share them within the Group to operate globally. It is crucial for Hitachi to take action to ensure healthy social progress worldwide.

# CSR at Hitachi

We formulated a Group vision to foster a prosperity-based corporate credo of contributing to society through the development of superior, original technology and products



We celebrate our centennial in 2010. In globalizing our operations over the past 100 years, we have addressed such United Nations Millennium Development Goals as ending poverty and hunger, providing universal education, combating diseases, and ensuring environmental sustainability. We will continue to contribute to a healthy, safe, and

comfortable lifestyle and environment around the globe by drawing on our accumulated expertise and technologies to produce innovations. We will also engage with stakeholders, reflecting social feedback in our strategy, product development, and operations to help resolve the social, economic and environmental issues confronting society.

## Five-Year CSR Roadmap



## CSR Roadmap

Hitachi produced its Three-Year CSR Roadmap, a medium-term plan for CSR activities, in fiscal 2006. We drew on this roadmap to review our various activities on society from a global perspective, and sought to resolve the resulting challenges. In fiscal 2009, these efforts included our selection in the Dow Jones Sustainability World Indexes (DJSI World).<sup>†1</sup> We also made the Silver Class in the *Sustainability Yearbook 2010* of Swiss firm Sustainable Asset Management<sup>†2</sup> and PricewaterhouseCoopers published in January 2010.

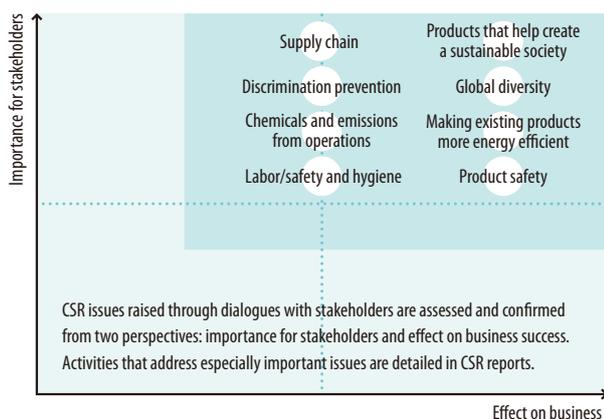
We have formulated a new Five-Year CSR Roadmap from fiscal 2010 and beyond. We will strive under this initiative to become a truly global corporation, reinforce Group operational foundations, quantitatively assess our CSR efforts, and function more transparently.

## Materiality Process

We include stakeholders in our CSR decision-making process. We engage with them worldwide on key strategic issues, evaluating global social problems requiring our attention from the perspectives of community and business sustainability. The CSR Promotion Committee deliberates on matters raised in stakeholder dialogues. This body of Hitachi executive officers incorporates the most significant ones into CSR initiatives for subsequent fiscal years and presents information on important social issues in the *Corporate Sustainability Report*.

In fiscal 2009, Hitachi representatives met in Brussels with officials from the European Union and non-governmental organizations and with socially responsible investors to discuss regional environmental policies and businesses.

### Summary of Issues That Hitachi Considers Important



## Employing CSR Self-Assessment Tools

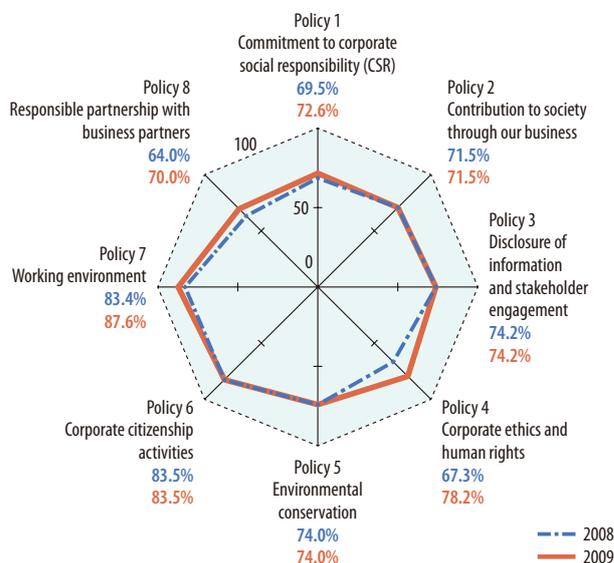
We use the CSR self-assessment tools that we developed in fiscal 2008 to clarify and strengthen our Group-wide CSR initiatives. We produced an English-language version of

the tools in fiscal 2009, testing them in North America and then supplying them to operations throughout Europe and Asia. Hitachi, Ltd. and 23 other Japanese and eight Group companies outside Japan employ these tools.

## Results of Fiscal 2009 Self-Assessment

Hitachi's self-assessment for fiscal 2009 scored higher than in the previous year, particularly for corporate ethics, human rights, and procurement. The gains were the fruit of a code of conduct and procurement guidelines based on the 10 principles of the United Nations Global Compact and efforts to strengthen our compliance system and engage with external experts. We aim to boost our score in fiscal 2010 by bolstering such areas as risk management, CSR education, and disclosure.

### FY 2009 Self-Assessment Results (Hitachi, Ltd.)



### Main Topics Covered in Each Policy of the CSR Self-Assessment Tool

- Policy 1: CSR vision; CSR education; risk management
- Policy 2: Coordination with business strategies; sustainable designs; customer satisfaction
- Policy 3: Information disclosure; dialogue with stakeholders
- Policy 4: Corporate governance structure; awareness of ethics; compliance; human rights
- Policy 5: Carbon management strategies; resource recycling; ecosystem conservation
- Policy 6: Strategic social contribution; participation in local communities; social enlightenment
- Policy 7: Respecting diversity; fulfilling work environments; work-life balance
- Policy 8: CSR procurement; communication with suppliers

<sup>†1</sup> Dow Jones & Company and Sustainable Asset Management codeveloped this benchmark for assessing companies from economic, environmental, and social perspectives.

<sup>†2</sup> This Swiss entity is a socially responsible investment assessment and asset management firm.

# Ensuring Strict Compliance

The Hitachi Group is reinforcing employee compliance, while taking steps to address risk

## Establishing and Implementing Corporate Ethics Month

Corporate ethics and compliance form the bedrock of all our activities. Starting from October 2009, October is Hitachi Group Corporate Ethics Month. This initiative highlights the need for executives and employees to always consider compliance in their actions, with top management taking the lead to enhance corporate ethics and adherence to legal requirements.

In the past, compliance officers were mainly stationed in sales divisions. Today, the general managers of all divisions and presidents or directors of Group companies concurrently serve as such officials.

In fiscal 2009, we distributed top management messages on compliance to all Group company employees and implemented workplace activities based on Hitachi's *Corporate Ethics and Compliance Handbook*. Other initiatives are displaying compliance messages on computer screens, ensuring awareness of our internal whistleblower system, and arranging presentations by external lawyers and compliance experts.

All business sites identified compliance risks and made improvements, if needed. With 15,000 employees attending, seminars were given by in-house and outside experts.

## Formulating the Hitachi Group Code of Conduct

Hitachi, Ltd. formulated the Hitachi Group Code of Conduct in August 2010 as part of a shift to a new Group management structure to mark Hitachi's centennial. This document prescribes specific requirements for all Hitachi Group employees from corporate ethics and compliance perspectives. The code applies to all officers and employees of Hitachi, Ltd. and its consolidated subsidiaries.

Hitachi Group Code of Conduct Web site:  
[http://www.hitachi.com/csr/csr\\_images/codeofconduct.pdf](http://www.hitachi.com/csr/csr_images/codeofconduct.pdf)

## Global Push to Stop Corruption

Japanese corporations outside Japan face tighter bribery controls and stronger provisions under competition laws. The U.S. Foreign Corrupt Practices Act has exposed an increasing number of cases. In August 2008, Hitachi, Ltd. formulated internal rules to prevent bribery of public officials in and outside Japan. We also established global guidelines on entertaining and exchanging gifts, detailing procedures and standards for assessing employee propriety. All Group companies have implemented similar regulations. In October 2008, an independent U.S. attorney delivered an anticorruption presentation to 212

### VOICES **Strengthening Compliance with U.S. Antitrust Laws**

**Craig P. Seebald**  
 Partner, McDermott Will & Emery LLP



It is more important than ever that Hitachi employees respect U.S. antitrust laws as U.S. antitrust enforcement continues to be a priority, and penalties are severe. U.S. antitrust laws

restrict companies and individuals from entering into anticompetitive agreements,

such as market allocation, price fixing and bid rigging agreements.

The best way to avoid antitrust risk is to follow Hitachi's policies and avoid communications with competitors unless there is a legitimate reason for the communication, such as negotiating business transactions (joint venture or a buy-sell relationship), participating in a trade association and/or engaging in standard setting activities. It is generally never acceptable to exchange

pricing, supply or customer information with a competitor. If you have any questions regarding competitor communications, please consult the Legal Department.

Antitrust compliance is not just for U.S. employees. Any employee who makes decisions that impact the U.S. market must comply with U.S. antitrust laws.

Group compliance officers.

In October 2009, we arranged for American and European outside lawyers to lecture 286 Group compliance officers about worldwide anticorruption trends, including U.S. and European competition laws.



Lecture on U.S. and European competition law trends

## Deploying e-Learning Tools to Reinforce Compliance in Asia

Group companies in seven Asian countries outside Japan and China strive constantly to boost corporate governance and compliance.

Hitachi Asia Ltd. developed the e-Learning System, which features modules for such risk areas as contracts, intellectual property, export controls, and anticorruption and antitrust laws. More than 1,000 employees registered to use these modules by the end of fiscal 2009.

To complement online learning, 90 employees from Singaporean and Indian Group companies attended seminars on contractual issues, legal systems, and export controls.



Compliance seminar in Asia

## Risk Management

All Hitachi divisions manage business risks, and then audit areas with potential issues. If problems do arise, divisions collect reports and formulate emergency plans to prevent recurrences.

Risks are increasingly global and complex. They now encompass everything from natural disasters and other traditional concerns to climate change, employee diversity, and human rights issues such as poor working conditions in the supply chain.

We are working across the company, by collaborating with in-house companies as well as Group companies, to rebuild our risk assessment standards. We audited the risks of headquarters operations and regional offices in the Americas, Europe, and Asia, assessing significant business and company-wide risks.

We will broaden risk audits to comprehensively reinforce our risk management framework. At the same time, we will improve risk awareness among all employees, notably through information sharing and education.

### VOICES

## Complying with European Commission Competition Law

Through working with Hitachi, Ltd. and various subsidiaries in connection with several European Commission investigations of alleged infringements of European competition rules, we found that each company has taken the investigations very seriously, not least because the Commission can impose significant fines for proven infringements, based partly on the volume of affected sales and the duration of a conspiracy. Since January 2007, the

Commission has imposed fines totaling over €800 million on Japanese companies for participating in cartels in breach of EU competition rules.

Compliance with the EU competition rules is therefore a key consideration for Hitachi. Its antitrust compliance program and a presentation on EU competition rules on Compliance Month on October, 2009, underscored that commitment.

Michael Reynolds  
Partner, Allen & Overy LLP

Philip Mansfield  
Partner, Allen & Overy LLP



# Hitachi's Worldwide Reach

The United Nations Millennium Development Goals, adopted in 2000, seek to address numerous global issues. They include poverty, education, and healthcare, and extend to dealing with aging populations and deteriorating social infrastructures in advanced nations.

The Hitachi Group is taking advantage of its diverse businesses and activities in 40 countries to help society resolve such fundamental issues.

**1 Advanced high-speed trains**  *in the United Kingdom*

**Hitachi, Ltd.**  
(detailed on page 10)



**2 EU-Hitachi Science & Technology Forum**  *in Europe*

**Hitachi, Ltd.**  
We joined hands with that nation's Department of Science and Technology to create a training program in Japan for young South African electric power engineers. The curriculum includes practical training at our plants and visits to electric power company facilities.



**3 Hitachi-DST Scholarship Program**  *for South African Engineers*

**Hitachi, Ltd.**  
Helping train young engineers

**4 Supporting information and communication technology training**  *in Saudi Arabia and other nations*

**Hitachi Software Engineering Co., Ltd. and other Group companies**  
We built and commercialized a new business model for purifying household sewage and selling the recycled water in Dubai, which depends heavily on desalination.



**5 Water recycling systems**  *in the United Arab Emirates*

**Hitachi Plant Technologies, Ltd.**

**6 Providing electricity to**  *Neemrana Industrial Park in India*

**Hitachi, Ltd.**

**7 Supplying advanced medical equipment**  *in Mongolia* <sup>+1</sup>

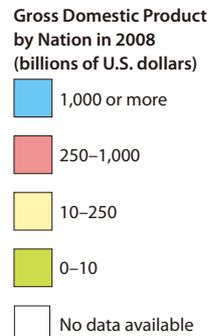
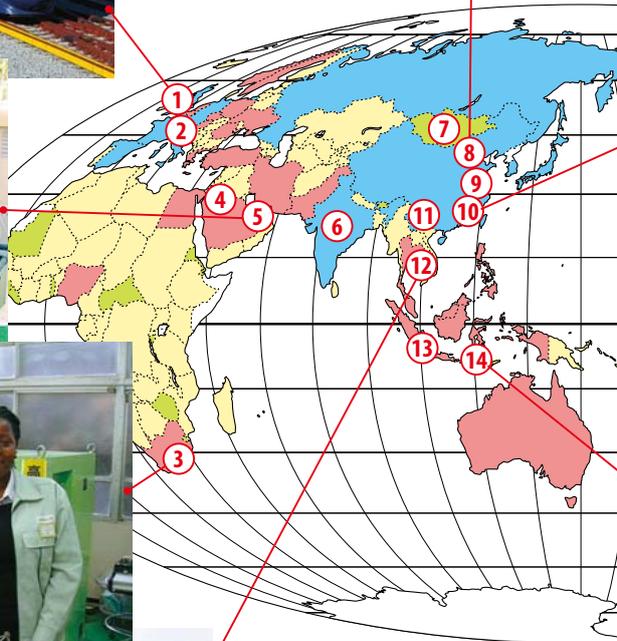
**Hitachi Medical Corporation**

**8 Visiting Chinese elementary schools and kindergartens to hold environmental classes** 

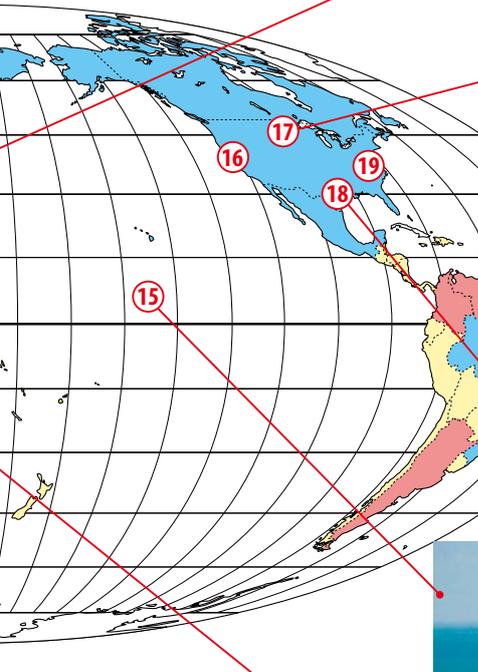
**Hitachi (China) Ltd.**  
We have run such classes continually in China since fiscal 2008.

**9 Donating a dormitory to Hitachi Hope Elementary School**  *in China*

**Hitachi (China) Ltd.**



GDP data source: International Monetary Fund  
<http://www.imf.org/external/>



**10 Model project for energy conservation in China** 

**Hitachi (China) Ltd.**  
We launched the Cooperation Project for Energy-saving and Emission Reduction among SMEs with the China Center for Business Cooperation and Coordination and the Ningbo Municipal People's Government.

**11 Global caravan activities in China, Thailand, and other countries** 

**Hitachi, Ltd.**  
PDF  Global caravan activities

**12 Removing antipersonnel mines in Asia and other regions** 

**Hitachi Construction Machinery Co., Ltd.**  
(detailed on page 14)

**13 Hitachi Young Leaders Initiative in Southeast Asia** 

**14 Installing photovoltaic power systems in areas without electricity in Indonesia** 

**15 Providing ballast water purification system in all regions** 

**Hitachi Plant Technologies, Ltd.**  
Tankers affect aquatic life because they repeatedly take on and discharge ballast water to adjust for cargo loads. We can swiftly purify this water through a technique that collects and magnetically separates organisms.

**16 Providing water pumping systems to California, U.S.A.** 

**17 Constructing ultra-supercritical pressure thermal power stations in the United States and elsewhere** 

**Hitachi, Ltd.**  
We have built numerous such world-class coal-fired facilities in the United States, Europe, and other countries.

**18 Supplying proton therapy system in the United States** 

**Hitachi, Ltd.**  
We developed a discrete spot scanning proton therapy technique to minimize damage to normal tissues, becoming the first to achieve Food and Drug Administration 510(k) clearance.

**19 Managing Hitachi North American Food Drive** 

**t1** Including magnetic resonance imaging, computed tomography, and x-ray systems  
**t2** This program instructs local manufacturing sites on ways to improve productivity and save energy  
**t3** Donating food to charities assisting low-income earners

# Supplying Advanced Railway Systems to the World

Leveraging advanced technologies and expertise to provide environmentally conscious and safe transportation



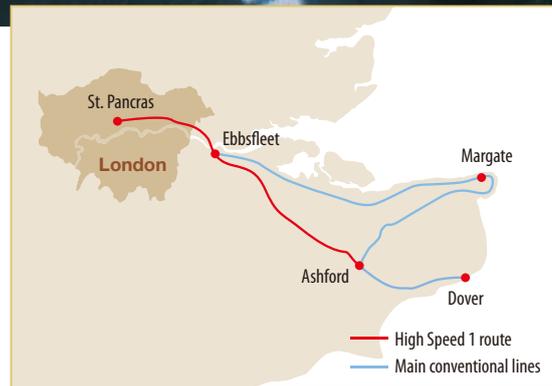
Ashford Train Maintenance Center

Modal shift has recently gained attention as a concept for transporting people and goods by alternative means to reduce environmental burdens. Ships and railways generate significantly less CO<sub>2</sub> per transportation unit than counterpart modes.

## Making Railways More Environmentally Conscious

Hitachi is building on its long involvement with *Shinkansen* (bullet train) and other railway projects to pursue technological advances. Work with East Japan Railway Company on a hybrid drive system that combines diesel engines and storage batteries is a good example.

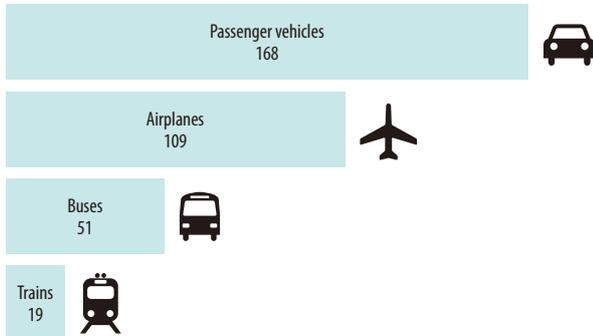
The A-train is one of Hitachi's railway systems. This rail vehicle system employs lightweight aluminum to slash operational energy consumption and simplify recycling, thereby minimizing ecological impact. The A-train's manufacture is dramatically more productive and



High Speed 1 route and main conventional lines on which British Rail Class 395 trains run

environmentally conscious than conventional models. That is because Hitachi can easily collect and recycle aluminum scrap during production and can automate fabrication because the train cars do not have frames. Friction stir welding, an innovative joining technology, minimizes warping and eliminates the need for painting. Modular construction slashes part numbers. Computers replace

### CO<sub>2</sub> Emissions from Different Means of Transportation



Grams of CO<sub>2</sub> per passenger kilometer in fiscal 2007  
 Source: Countermeasures against Global Warming in the Transport Sector (in Japanese), Ministry of Land, Infrastructure, Transport and Tourism

many of the tasks of skilled engineers, ensuring high quality and safety, even with short delivery schedules.

### Hitachi Train Well Received in the United Kingdom

Hitachi's Class 395 high-speed train debuted on High Speed 1, the United Kingdom's first high-speed railway line. Regular passenger service began in December 2009. We won the contract to supply these trains because we pledged to deliver six months ahead of schedule and because of the proven reliability of the technologies.

High Speed 1 connects London and Ashford in just 37 minutes, down from 80 minutes before. Sir Stephen Gomersall, Chief Executive for Europe, Hitachi Ltd., commented that, "The first domestic high speed train service in the UK has been a great success since its inauguration. South Eastern Railway Ltd. was pleased by the early delivery

and minimal disruption when starting the regular service. The Class 395 also won in the Rolling Stock Excellence category of the Eversholt Rail Business Awards 2009, recognizing that the 174 cars that Hitachi delivered are among the best in the UK." He added that, "Hitachi is handling up-keep at the newly constructed Ashford Train Maintenance Center, which hired most of its staff locally. Employees benefit from excellent training opportunities that enable them to keep refining their skills. The fast service into London has regenerated Ashford and the entire region of Kent. Hitachi is looking for further opportunities to serve potential growth in railway demand throughout Europe."

Such a renewed interest in railways is spreading around the world, notably through the emergence of U.S. plans for a high-speed railway network. Hitachi is contributing to such planning in the United States, in Brazil, which is planning its setup ahead of the Rio 2016 Olympic Games, and in India. Contributions to modal shifts are yet another example of how Hitachi helps combat climate change.

### Hitachi's Railway Technology

Highly efficient	Accelerates modal shift	<ul style="list-style-type: none"> <li>A-train (aluminum train cars)</li> <li>High-speed train</li> </ul>
Environmentally conscious	Further reduces environmental load of railways	<ul style="list-style-type: none"> <li>Small, lightweight inverter</li> <li>Hybrid drive system</li> </ul>
Highly reliable	Contributes to safe, stable, and high-density transportation	<ul style="list-style-type: none"> <li>Signaling and train control systems</li> <li>Traffic system</li> <li>Operations systems</li> </ul>

### VOICES Class 395 Proves the Advantages of High-Speed Rail

Charles Horton  
 Managing Director of London & South Eastern Railway Ltd.

The introduction of the UK's first high-speed trains has been a great success. The new Class 395 trains have meant that commuters in parts of the South East have been able to reduce their journey times by half. As important though, is the effect the new services are having on the local economy with businesses moving to the South East and likewise commuters moving to the area.

Throughout the program we have felt reassured and confident in (Hitachi's) abilities.

We think their particular strengths are their emphasis on process, commitment to on time delivery and focus on reliability, enabling us to run "preview" services six months early.

With all big complicated railway projects there are always going to be challenges along the way, but it is testament to the strong partnership we have working with Hitachi that these have all been overcome.

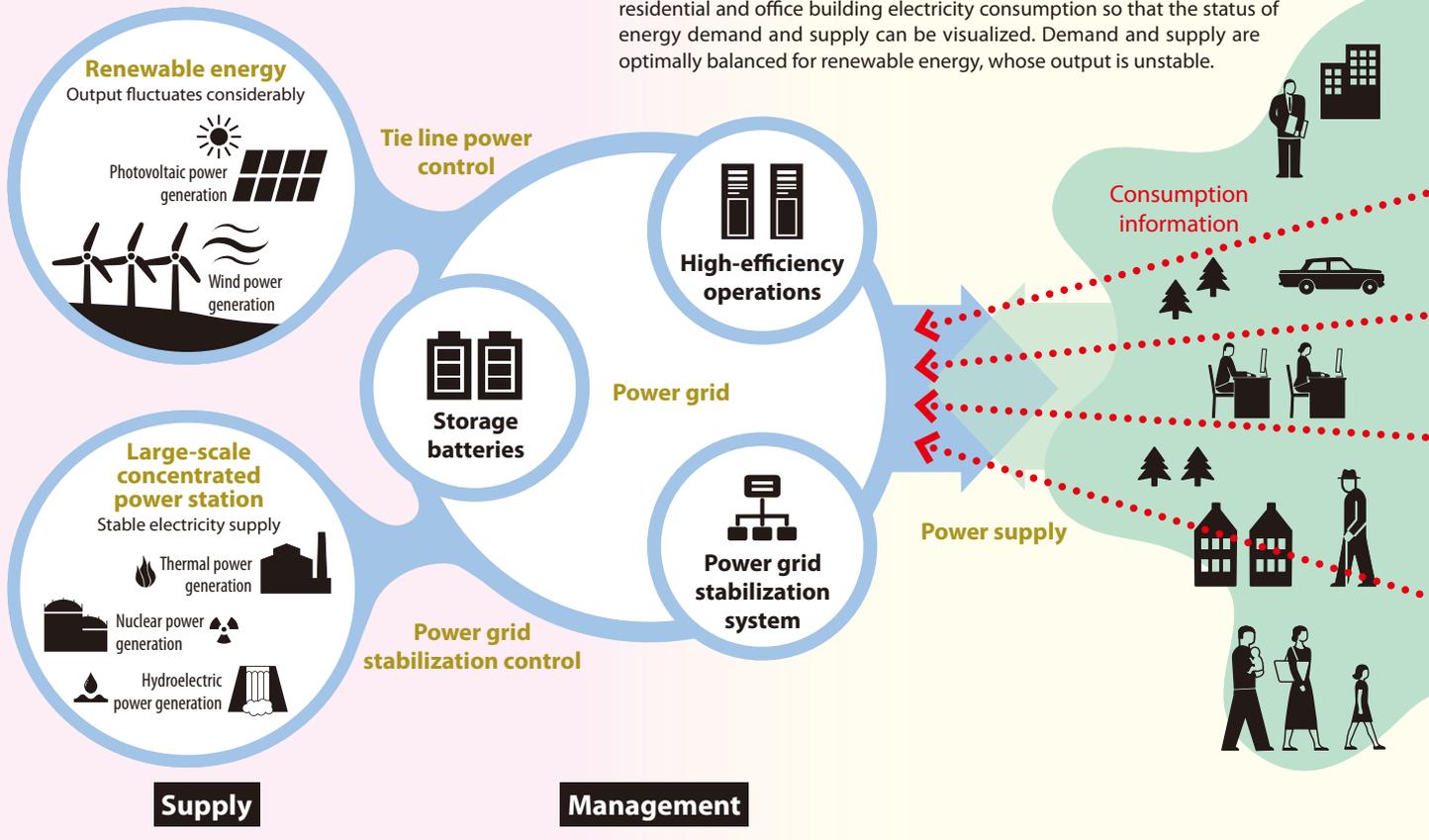


# Fusing Technologies to Create Smart Energy Solutions

Harnessing our strengths in electric power and information technology to create smart grids that transform energy use

## Hitachi's Smart Grid Concept

We supply power grid stabilization systems and advanced metering infrastructure systems that provide detailed assessments and management of residential and office building electricity consumption so that the status of energy demand and supply can be visualized. Demand and supply are optimally balanced for renewable energy, whose output is unstable.



The increasing deployment of power systems that harness solar and other renewable energy is helping reduce carbon emissions and society's dependence on fossil fuels. But there are numerous challenges in producing electricity from these resources. Weather conditions cause dramatic fluctuations in output from solar and wind power, increasing the potential for the entire power supply system to become unstable.

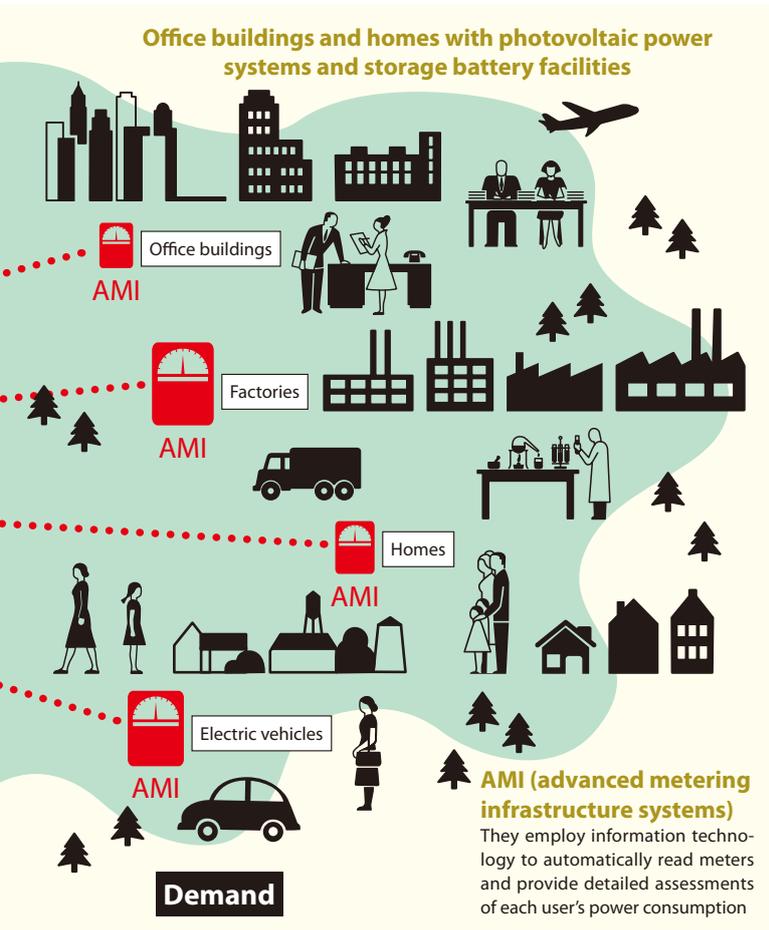
### Toward Smart Grid Installations

Smart grids are vital for stabilizing and securing the power supply. During transmission from unstable sources of electricity or disruptions, smart grids can swiftly obtain and process output and demand data, then automatically optimize or secure the demand and supply balance. This is why there is such great worldwide interest in smart grids, although it is important to note that local transmission and distribution network requirements currently determine setups.

Japan, for example, has already completed some of the power generation and transmission stages of a smart grid. Hitachi is working on the next step, which will be the installation of a smart grid for the entire power network, encompassing residential and office building electricity consumption.

### Linking Homes and Electric Power Companies with Information

Expanding an advanced metering infrastructure will be the first step toward a truly smart grid and a smarter city that links homes and electric power companies through information and communications. Once in service, this infrastructure enables utilities to remotely monitor and deal with customers who relocate. Another advantage is that those companies would get the details on how much electricity home users consume or send to the grid from their residential photovoltaic power systems. Kansai



Electric Power Co., Inc. and Kyushu Electric Power Co., Inc. have already begun on-site assessments of advanced metering infrastructure systems. The two utilities have installed Japan's first telecommunications-equipped watt-hour meters in homes as part of those trials. The data that they collect should help stabilize the power grid.

Linking homes and electric power companies through an information and communications infrastructure would enable all residential users to streamline power consumption in line with generation from renewable energy sources.

Hitachi will join hands with Japan Wind Development Co., Ltd., Toyota Motor Corporation, and Panasonic Electric Works Co., Ltd., and several other companies to launch the Smart Grid Demonstration Site at Rokkasho Village in Aomori Prefecture, Japan in August 2010. Testing will include charging electric vehicles from wind and photovoltaic sources, with batteries storing surplus power. Trials will also cover residential electricity consumption.

## Making Our Environmental Technologies Available to the World

In many countries, transmission and distribution networks are either aging or underdeveloped. Supplying networks that draw on renewable energy could significantly alleviate global warming.

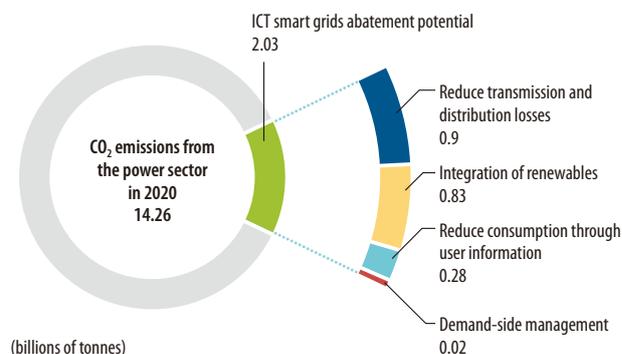
We will supply advanced environmental technologies, tailoring them to local conditions and accumulating new knowledge. These priorities will be central to our involvement in a Japan-U.S. smart grid trial that will begin in New Mexico during 2010. Another project will be a collaborative initiative in China to lower that nation's reliance on carbon fuels and to foster recycling. We will inevitably need to tackle the challenges of creating international standards for technologies and will therefore participate in multi-government and private-sector initiatives.

The involvement of all key stakeholders will be essential for realizing our smart grid concept. They include national and local governments, electric power companies, automakers, appliance manufacturers, and commercial and residential power consumers.

We will maintain open relationships with all these stakeholders while contributing to smart grid development that effectively harnesses renewable energy, such as solar and wind.

### Smart Grids: The Global Impact in 2020

The global deployment of smart grids would lower CO<sub>2</sub> emissions an estimated 2.03 billion tonnes worldwide by 2020. That saving would represent 4 percent of the 51.9 billion tonnes of emissions forecast for that year.



Source: SMART 2020, published by The Climate Group

# Improving Lives One Person at a Time

Continuing to Pursue United Nations Millennium Development Goals



We collaborate with local enterprises and support non-profit organizations as part of ongoing efforts to help resolve local community issues.

## Improving Quality of Life after Demining

The land mine clearing equipment that Yamanashi Hitachi Construction Machinery Co., Ltd.<sup>†1</sup> developed in 2000 is operating in civil war-ravaged Cambodia. However, engineers from Hitachi Construction Machinery Co., Ltd. who were in Cambodia realized that clearing land mines alone would not resolve difficulties in the communities.

People who lost their homes and work during the civil war set about cultivating the cleared land and rebuilding their lives. However, such work is tough without basic infrastructure such as roads and water, or even farming techniques. As a result, engineers noticed that people frequently abandoned their land.

This situation prompted former Hitachi Construction

Machinery employees to establish the non-profit Good Earth Japan in March 2007. Since its creation, this non-profit organization has provided agricultural training and plowed paddy fields. It has also built schools to help farmers get back on their feet. Hitachi Construction Machinery and the rest of the Hitachi Group are fully funding these efforts, with numerous employees assisting.

## Brightening Communities with Electricity

Around 230 million people live on Indonesia's more than 17,000 islands. Yet, only about 60 percent of the population has access to electricity. Approximately 60 percent of Indonesians live on Java, which represents 7 percent of the nation's land area and accounts for 80 percent of its energy consumption. The population density of Jakarta is similar to that of Tokyo's 23 wards. But there the comparisons end, as Jakarta residents suffer from constant planned and unplanned power outages.

The Indonesian government takes this social issue seriously, but it has experienced significant delays in its plans to deliver 95 percent electricity access by 2025. So, Hitachi High-Technologies joined hands with a local business partner that makes storage batteries to electrify districts with photovoltaic power systems.

Indonesia gets around double Japan's sunshine hours and solar radiation. The government has already installed compact solar systems to power homes without access to the grid, but the need to place such systems in each home caused power efficiency to deteriorate and made it hard to set up a proper maintenance and management structure.

Hitachi High-Technologies therefore chose to set up large photovoltaic power systems to serve entire villages by charging residents' batteries as needed. Villages without electricity traditionally comprise 50 to 100 households, so the company concluded that coordinating closely with

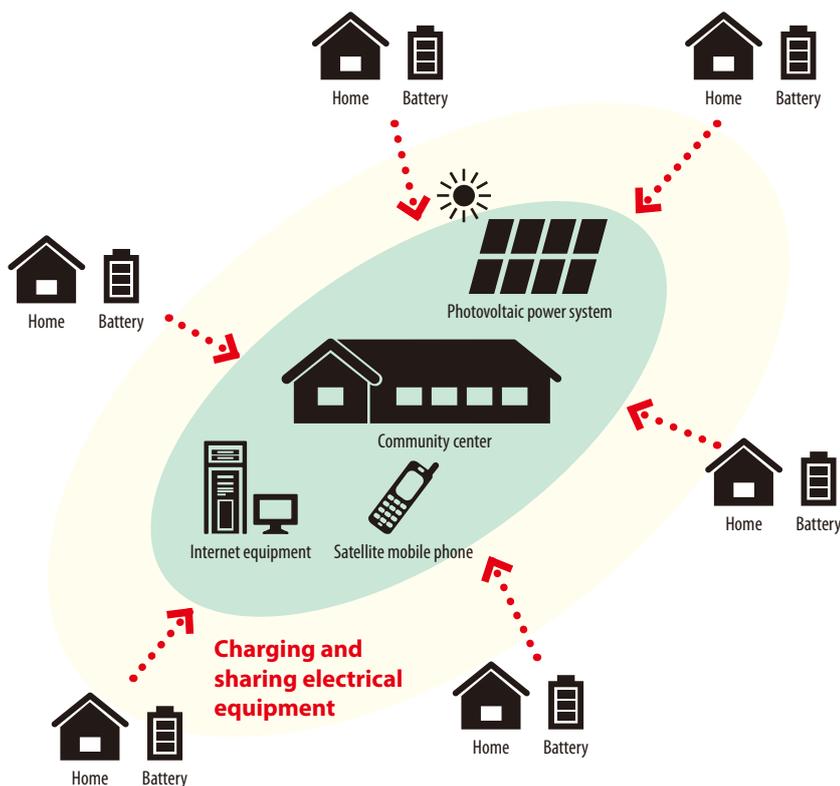
these communities would improve the generating, maintenance, and management efficiency of these systems.

Another benefit is that residents can take advantage of stable electricity supplies to do business. Ventures under consideration include Internet cafés offering refrigeration and access to mobile communication-equipped PCs and the industrial production of silk and tapioca.

In response to strong demand from Indonesia's central and local governments, Hitachi High-Technologies plans to install battery recharging stations in three villages in fiscal 2010. Training teams of residents to maintain and manage the equipment will be crucial to ensuring that villages widely adopt these systems.

<sup>†1</sup> An exclusive dealer and authorized factory for Hitachi Construction Machinery since 1980, Yamanashi Hitachi Construction Machinery developed the world's first remote-controlled land mine removal machine, which is based on a Hitachi Construction Machinery hydraulic excavator. Currently, 70 units operate in Cambodia as well as six other countries (Vietnam, Afghanistan, Nicaragua, Angola, Thailand, and Colombia).

### Indonesian Village Electrification



Village without electricity (Indonesia)



Battery recharging station



## Living Together with Society 1

# Procurement, the Supply Chain, and Respect for Human Rights

We center our corporate activities around the concept of cherishing humanity. We respect the human rights of stakeholders in every aspect of our business and the supply chain, including in terms of product safety, environmental conservation, disclosure, anti-corruption, and employment practices.

# 1923

## A Century of Service

### Helping Rebuild Tokyo after the Great Kanto Earthquake

The Great Kanto Earthquake of 1923 devastated the Keihin industrial zone, which was the heart of Japanese manufacturing, surrounding the ports of Tokyo and of Yokohama. Orders from around the nation poured into the Hitachi Works in Hitachi, Ibaraki Prefecture, Japan, as it was unscathed. But Hitachi rejected such opportunities for profit, preferring to devote all its production capacity to help rebuild Tokyo. Hitachi became renowned for excellence in the process, and demand for its products subsequently soared.



Photograph courtesy of the National Museum of Nature and Science (Japan)

## Raising Awareness of Human Rights

We reviewed all internal corporate ethics and compliance rules and developed or overhauled our training programs to enhance human rights awareness Group-wide. Almost 80 percent of our 260,000 Group employees in Japan took our related e-learning course in fiscal 2009. We are working on an English version of this program for Group companies outside Japan.



## Participating in Supply Chain Sustainability Team

The United Nations Global Compact Advisory Group on Supply Chain Sustainability chose Hitachi, Ltd. as a member in fiscal 2009. That body focuses on encouraging adherence to human rights, labor, environment, and anti-corruption principles. We will draw on our expertise in these global social issues to support the UN's efforts and similarly we will draw upon best practices resulting from the UN Global Compact's recommendations on implementing supply chain sustainability programs.

## Implementing European Human Rights Project

We launched a human rights project in Europe in fiscal 2009, the purpose of which is to ensure that human rights are fully respected in all aspects of our operations. As part of this, we hold awareness seminars, develop tools for in-house education, and improve our internal mechanisms. We aim to use this project as a model for supporting human rights issues around the world.

## Collaboration with Suppliers

The Hitachi Group values partnerships and openness with suppliers. We accordingly strive to maintain and improve mutual understanding, offering equal business opportunities and choosing suppliers in keeping with the principle of free competition.

We publish and disseminate the *Hitachi Supply-Chain CSR Deployment Guidebook* throughout the Group. This document conforms with the guidelines of the Japan Electronics and Information Technology Industries Association. We recommend our suppliers to use this guidebook for self-evaluation, a process that improves mutual understanding and communications about CSR issues. We revised the *Hitachi Guidelines for Procurement Activities* in June 2009 in line with United Nations Global Compact principles.

## Surveying CSR Implementation

In fiscal 2009, we surveyed CSR implementation at 255

## TOPICS

### Exchanging Opinions on Human Rights Issues

Hitachi, Ltd. representatives met with officials from Amnesty International Japan in fiscal 2009 to gain further insights into human rights issues and how companies should address them. Makoto Teranaka, secretary general of the organization, advised Hitachi to be aware of human rights issues beyond permanent employees to encompass contract workers, suppliers, and other parties. We will draw on such suggestions to become even more sensitive to human rights, focusing particularly on improving our supply chain management in that regard by collaborating with relevant parties.

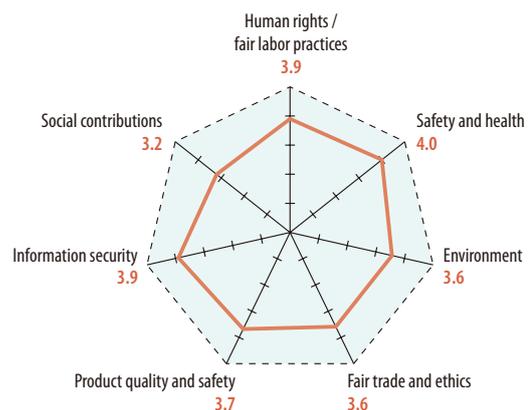


Makoto Teranaka, Secretary General, Amnesty International Japan

suppliers in line with the *Hitachi Supply-Chain CSR Deployment Guidebook*, analyzing the results and providing feedback. Respondents generally paid more attention to human rights, labor practices, safety and health, and fair trade and ethics issues than a year earlier. Such surveys aim to ensure a shared understanding of CSR while encouraging suppliers to further improve their efforts. We are building a results database for sharing throughout the Group.

### Results of Surveys Conducted to Promote CSR among Suppliers

Maximum score for each category: 5 points



(132 companies responded as of the end of March 2010)

United Nations Global Compact

<http://www.unglobalcompact.org/>

Hitachi Group Supply-Chain CSR Deployment Guidebook

[http://www.hitachi.com/procurement/policy/\\_icsFiles/afidfile/2010/08/30/SC\\_CSR\\_E\\_2.pdf](http://www.hitachi.com/procurement/policy/_icsFiles/afidfile/2010/08/30/SC_CSR_E_2.pdf)

Hitachi Guidelines for Procurement Activities

[http://www.hitachi.com/procurement/policy/\\_icsFiles/afidfile/2010/08/30/guidelines.pdf](http://www.hitachi.com/procurement/policy/_icsFiles/afidfile/2010/08/30/guidelines.pdf)



## Living Together with Society 2

# Providing Supportive and Diverse Workplaces

At Hitachi, we believe that respecting and valuing the diversity of our employees creates synergy and adds new value.

# 1910

A Century of Service

## Cultivating People since Our Inception

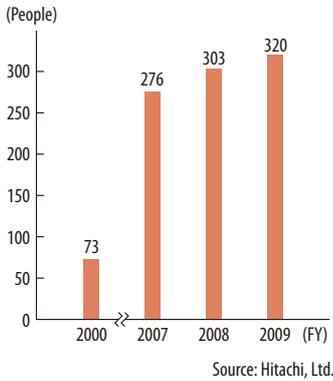
At a time when many children entered the workforce right after completing elementary school, Hitachi, Ltd. set up the Apprenticeship Training School inside its factory in April 1910, its founding year. The school provided general and technical instruction. Although many students joined other companies after graduating, Hitachi founder Namihei Odaira said, "I'm satisfied if they contribute to Japanese industry." The school later became the Hitachi Technical High School, which has graduated numerous technicians as custodians of Hitachi's tradition of *monozukuri* (designing, manufacturing, or repairing of products) craftsmanship, including WorldSkills International gold medalists.



## Diversity Embodies Our Respect for Individuality

The Diversity Development Project spearheads our drive for workplaces that empower our diverse people to realize their potential. We inaugurated the Diversity Development Group Council in fiscal 2009 to complement our efforts. Council members from 19 Hitachi Group

### Number of Female Managers



companies gathered quarterly during the year to share successes and discuss issues. We have continually held a diversity forum, assisted in the creation of employee networks, and disseminated more information through our intranet.

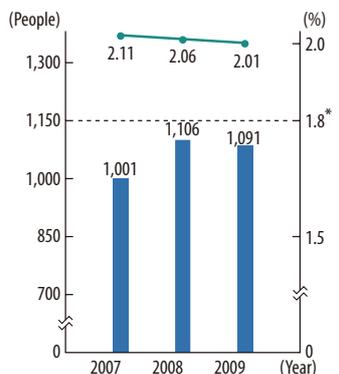
### European Diversity Project

We launched the European Diversity Project in June 2009. With gender diversity as the main focus, a tools package which includes internal awareness-raising tools such as training materials, Group-wide policies, and a comprehensive e-learning program has been developed. The package is accessed and widely used by all Hitachi's European employees. We perceive diversity not in isolation, but closely linked with human rights, namely the right to non-discrimination and equal opportunities. Diversity will therefore remain a top priority for the Hitachi Group.

### Employing People with Disabilities

The Hitachi Group employs around 3,000 people with disabilities, and 180 work for four special subsidiaries. Every year, we hold a job interview fair, in collaboration with Public Employment Security Offices, for disabled job seekers. We also exchange information within and outside the Group to help maintain ongoing employment for these people. Group companies provide internships in association with schools and local support organizations, educate personnel about mental illnesses, and otherwise

### Employment Ratio of People with Disabilities



## TOPICS

### Offering Attractive Employment for People with Mental Disabilities



**Ritsuko Gomibuchi**  
Psychiatric Social Worker

**Satoshi Fujiwara**  
Supervisor,  
Employee Relations &  
Human Resources Dept.,  
Hitachi, Ltd.

Hitachi, Ltd. began participating in the Ministry of Health, Labour and Welfare's Model Project to Promote Employment of Persons with Mental Disabilities<sup>†1</sup> in May 2009. As part of its involvement in that project, Hitachi arranges seminars and trains personnel in-house to help enhance workplaces for employees with mental disabilities. Hitachi hired three such people in fiscal 2009. Project leader Satoshi Fujiwara says, "We want to create bright new vistas for people with disabilities, expand employment opportunities for them throughout Hitachi, and share our expertise in this area with as many companies as possible."

strive to offer more employment and responsibilities for people with disabilities.

### Work-Life Balance

Physical and mental health is vital for balancing professional and personal life. Hitachi improved and expanded its childcare and nursing care support systems while offering family leave and reduced working hour programs to create more attractive workplace environments. We also improve processes to prevent traditionally long working hours, deploy initiatives to promote physical and mental health, and provide training to enhance workplace communications.

		FY 2007	FY 2008	FY 2009
Employees taking childcare leave	Female	436	451	504
	Male	2	8	6
Employees taking nursing care leave	Female	10	8	6
	Male	10	10	5
Employees using reduced working hour program	Female	349	381	287
	Male	1	2	1

Source: Hitachi, Ltd.  
Number of people who used system at least once during period in question

<sup>†1</sup> Hitachi, Ltd. is one of 10 companies participating in the Model Project to Promote Employment of Persons with Mental Disabilities. This project strives to improve workplace understanding of people with such disabilities and develop attractive career opportunities for them.



## Hitachi's Environmental Conservation

# Environmental Management toward a Sustainable Society

Our goal is to achieve a more sustainable society by promoting production that reduces the environmental burden of products throughout their life cycle.

# 1942

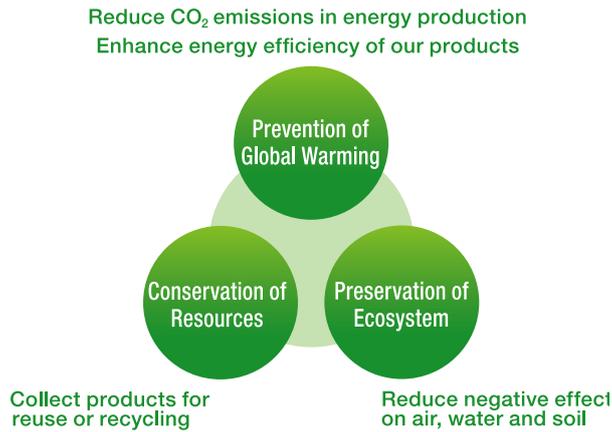
A Century of Service

## Pioneering Effort in Environmental Conservation

In 1942, when Hitachi's Central Research Laboratory (HCRL) was established in Kokubunji in Tokyo, Namihei Odaira, founder of Hitachi, Ltd., gave instructions not to cut down good trees but build around them, in order to preserve the natural beauty of the Musashino area. This lush natural environment, which can still be found today near the laboratory, continues to bring tranquility and refresh the hearts of researchers and visitors alike; and is treasured by local residents who visit the laboratory grounds during the open days held each year in spring and fall. Inheriting the spirit of our far-sighted founder, we continue to pursue a policy of harmony with the environment in building facilities and laboratories in various locations.



Dr. Kumeo Baba, first general manager of HCRL



## Towards a Sustainable Society

### Hitachi's Environmental Vision

The quest for a comfortable existence has led humankind to create a highly convenient society. Today's society, however, requires a vast amount of energy, and this is causing problems such as global warming, resource depletion and environmental damage. We must work to provide solutions to these issues if we are to assist society in maintaining a comfortable existence into the future.

We are committed to the prevention of global warming, the conservation of resources, and the preservation of the ecosystem as the three pillars of our vision. Our goal is to achieve a more sustainable society by promoting global production that reduces the environmental burden of a product throughout its life cycle.

### Achieving Environmental Vision 2025

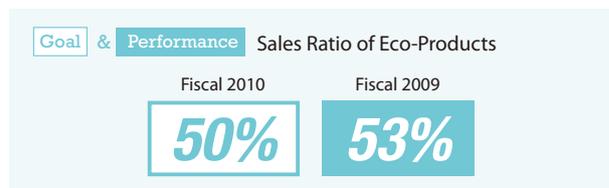
Hitachi's long-term plan Environmental Vision 2025, created in 2007, sets the goal of helping reduce annual CO<sub>2</sub> emissions by 100 million tonnes by 2025 through Hitachi products and services.

Seventy percent, or 70 million of those 100 million tonnes, comes from electric power generation and other aspects of the energy supply, while 30 percent, or 30 million tonnes, is associated with energy consumption, including industry, transportation, commercial, and residential uses.

In fiscal 2009, to ensure the reliability of our calculations on reduced CO<sub>2</sub> emissions, we introduced a standard calculation method. We also had a third party review the method and the results obtained for nuclear, coal-fired, thermal, hydraulic and wind power generation, as well as for an energy-saving service using inverters and 10 products including servers.

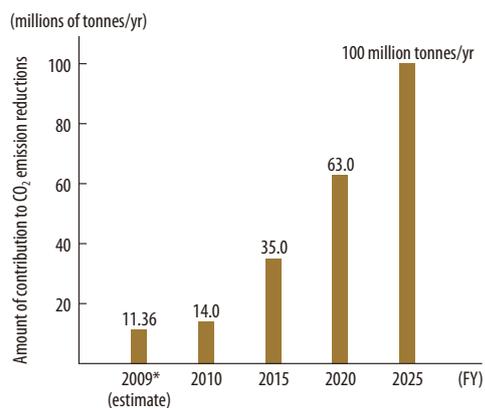
Our contribution to CO<sub>2</sub> emission reduction in fiscal 2009 was 11.36 million tonnes (estimate).

To achieve our Environmental Vision goals, we aim to make all of our products environmentally conscious Eco-Products<sup>t1</sup> through our technology.



Hitachi Group product models registered as Eco-Products reached 8,387 during fiscal 2009, lifting the ratio to 53 percent of all Group revenues. As this attained the fiscal 2010 goal of a 50 percent ratio, the 2010 goal was raised to 55 percent.

### Amount of Contribution to CO<sub>2</sub> Emission Reduction (Base: FY 2005)



\*CO<sub>2</sub> emission coefficients were calculated using fiscal 2007 figures from the International Energy Agency's (IEA) *CO<sub>2</sub> Emissions from Fuel Combustion Highlights (2009 Edition)*.

<sup>t1</sup> **Eco-Products:** Products that meet certain standards under the Assessment for DfE (Design for Environment) system, which uses criteria such as material reduction and longevity to provide a quantitative assessment of the environmental burden.

## Prevention of Global Warming

The IEA's *World Energy Outlook 2009* listed fiscal 2007 world energy-related CO<sub>2</sub> emissions at 28.8 billion tonnes, and estimated that this would reach 52.2 billion tonnes by 2050 if the current trend continues. The IEA has therefore called on governments to cut these emissions.

To meet our Environmental Vision goal—helping reduce annual CO<sub>2</sub> emissions by 100 million tonnes by 2025 through Hitachi products and services—we are working to cut greenhouse gases emitted at each of the three stages: manufacturing, transporting, and using products. We are also employing our technologies and knowhow to provide customers with energy-saving services.

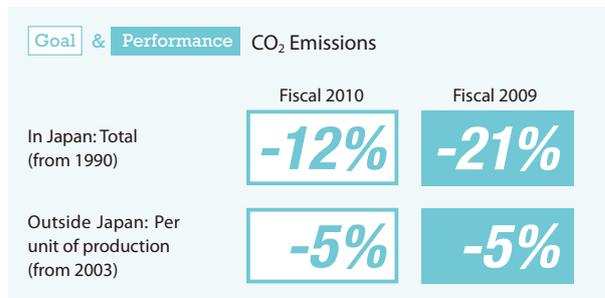
### Reducing CO<sub>2</sub> in Plants and Offices

In fiscal 2009, we invested 5.2 billion yen to save energy across our operations in Japan, reducing annual CO<sub>2</sub> emissions by 43,000 tonnes from fiscal 1990 levels. We will introduce more energy-saving equipment into Group operations and boost switching to natural gas in areas such as materials processing, where a great deal of heavy fuel oil is used. Switching from heavy oil to natural gas would cut CO<sub>2</sub> emissions by around 30 percent, so

we plan to reduce Group-wide heavy oil use to below 10 percent of the fiscal 2005 figure in 2012.

To save even more energy in Hitachi offices, sales offices, data centers and other non-manufacturing operations, we have created management standards to measure energy use. We have also built a system for gathering electronic data on energy use by operational unit, enabling us to analyze energy use and facility inspections, which are now revealing areas for improvement.

Outside Japan, despite production increases, CO<sub>2</sub> emissions in fiscal 2009 were cut by 22,000 tonnes, a five percent reduction per unit of production from 2003. In countries such as China with rising CO<sub>2</sub> emissions, we are promoting energy savings by having experts analyze energy use at every plant and manufacturing center. These experts are making energy reduction proposals. We are also using energy-saving technologies developed in-house to increase business with other companies.



## TOPICS 1

### Technology Exchange Conference in China

We are cooperating with China on energy saving and environmental protection projects, focusing particularly on the social infrastructure development that the Chinese government is advocating. In November 2009, Japan-China joint projects were launched in five areas: smart grids, new energies, rail systems, water resources, and recycling. As part of these initiatives, in March 2010 we joined with the National Development and Reform Commission, China's economic policy-making body, to hold the Green Economy and Technology Exchange Conference in Beijing to introduce Hitachi's cutting-edge technologies to China. We will continue to introduce the latest environmental technologies and leading-edge cases to China, collaborating with China on joint ventures, joint research, and other projects.



## Conservation of Resources

To address the global problems of resource depletion and environmental pollution, we urgently need to develop a material-cycle society that will lower natural resource consumption and reduce the impact on the environment. In response, we are consuming fewer resources during product manufacturing. We are also boosting resource recycling by cutting emissions during production and converting waste into raw materials and energy, as well as reusing end-of-life products.

### Developing Technologies for Rare Metal Recovery

We will soon be recycling scarce or difficult-to-extract rare metals. In particular, rare earths used in energy-saving air conditioners, washing machine motors, and hybrid cars are being recovered using acids and alkalines and other technologies with a heavy environmental burden. Additionally, we are developing technologies that will further reduce or eliminate that burden and its associated costs, by enabling more efficient separation and recovery. We plan to have these recycling operations running by 2013, recovering around 10 percent of the rare metals used annually by the Group.

**Ecosystem Assessment Guidelines at Hitachi Chemical**

**Reducing Waste Emissions**

To reduce the amount of both valuable and non-valuable wastes, we have been improving production and manufacturing processes, recycling raw materials and changing packaging specifications. In fiscal 2009, we achieved a 33 percent reduction in waste emissions from 2000 within the total-waste reduction group.<sup>†1</sup>

We recycle resources through methods such as reuse, material recycling, and thermal recycling (recovering and using heat energy from incineration), while also reducing the environmental burden.



Result from the total-waste reduction group

**Preservation of Ecosystem**

The UN Millennium Ecosystem Assessment shows that the rapid changes that people have made to the earth's ecosystem are reducing the benefits supplied by this ecosystem.

To lighten the ecosystem burden imposed by our own social and corporate activities, we are contributing to the preservation of the ecosystem and biological diversity in the three areas shown below.

**Reducing VOC Emissions**

We are cutting emissions of the volatile organic

<p><b>Contribution through business</b></p> <p>Supply products and services that protect the ecosystem through air, water, and soil purification.</p>	<p>Water treatment system for ship ballast water (seawater used as weight to keep a ship balanced) / advanced sewage processing system / denitration catalyst for separating nitrogen oxides from boiler and power plant exhaust gases / management system for chemicals contained within products</p>
<p><b>Contribution through environmental management</b></p> <p>Gauge and reduce the ecosystem burden from corporate activities</p>	<p>Wastewater outflow reduction / reduced chemical substance use / recognition of the biogenic nature of raw materials / greenhouse gas emission reduction / material-cycle promotion</p>
<p><b>Nature protection activities</b></p> <p>Contribute to ecosystem recovery through afforestation, etc.</p>	<p>Afforestation by Hitachi employees / management of more than 800,000 trees within Hitachi grounds / support for endangered species protection</p>



Ayako Kohno, Hitachi Chemical

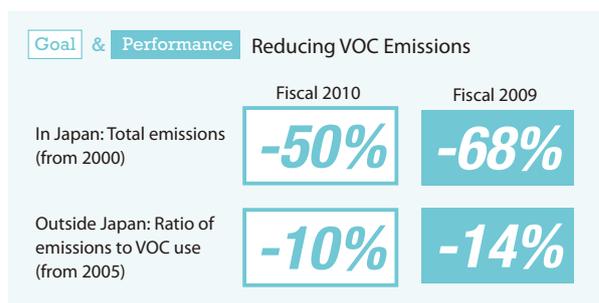
The Corporate Ecosystem Services Review (ESR) is a structured methodology for understanding the impact of companies on ecosystems, as well as corporate dependence on ecosystems, and identifying business risks and opportunities. The World Business Council for Sustainable Development designed this evaluation tool in collaboration with the World Resources Institute and the Meridian Institute.

Hitachi Chemical provides a Japanese translation of the ESR on the Internet in order to promote the use of this method among Japanese companies. As well, we are using the ESR methodology ourselves to deepen our understanding of the impact of business activities on ecosystems.

WEB The Corporate Ecosystem Services Review (ESR)

<http://www.wbcsd.org/Plugins/DocSearch/details.asp?DocTypeId=25&ObjectId=Mjg5NjQ>

compounds (VOCs) that cause air pollution. Based on a program from the Ministry of the Environment to reduce VOC emissions, our own emission reduction plan covers 41 VOCs, replacing them with alternative substances and installing equipment to recover and neutralize VOCs. In fiscal 2009, we reduced our VOC emissions in Japan to 68 percent of the year 2000 level. Outside Japan, given that manufacturing is relocating there and production is rising, goals for these plants have been set using an index of the ratio of emissions to VOC use. In fiscal 2009, we cut this emission ratio<sup>†2</sup> by 14 percent from the 2005 level.



<sup>†1</sup> **Total-waste-reduction group:** Group of business sites using a fixed amount of waste as a reduction goal. The other group of business sites uses the amount of waste per unit of production as the reduction goal because of the particular characteristics of the waste generated by those sites.

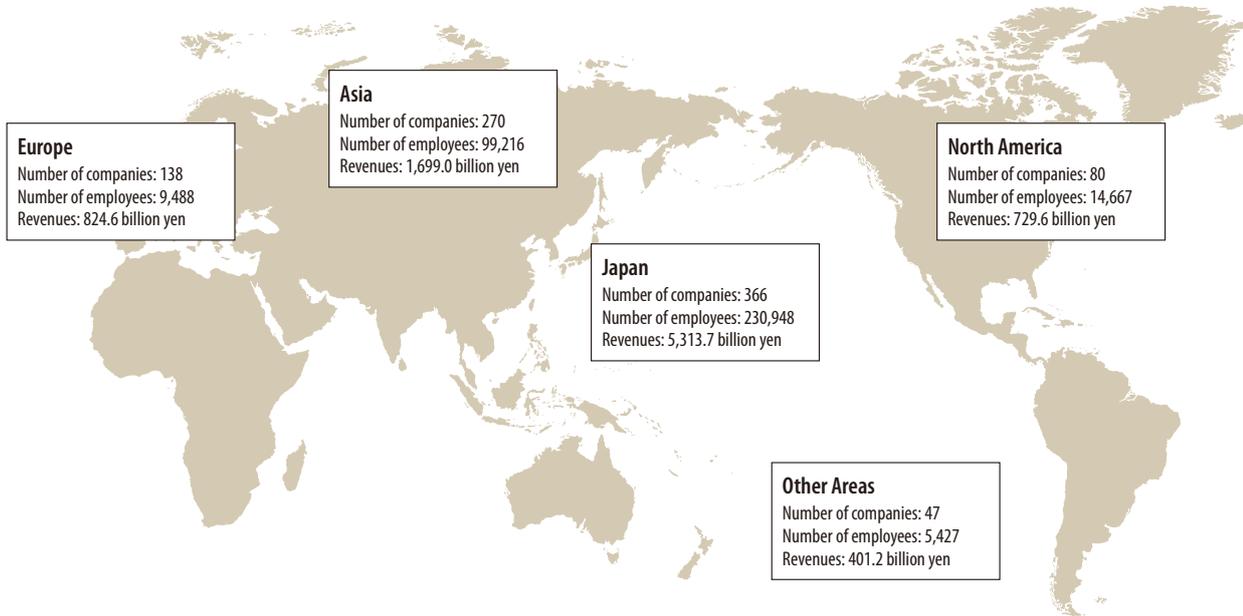
<sup>†2</sup> **Emission ratio** = VOC emissions/total VOCs handled

## Company Profile

Corporate Name	Hitachi, Ltd.
Incorporated	February 1, 1920 (founded in 1910)
Head Office	1-6-6 Marunouchi, Chiyoda-ku, Tokyo 100-8280, Japan
Representative	Hiroaki Nakanishi, Representative Executive Officer and President

## Hitachi Group Profile

Hitachi, Ltd. and the Hitachi Group make up a corporate group consisting of 1,058 companies: 365 consolidated subsidiaries within Japan and 535 outside Japan, as well as 71 equity-method affiliates in Japan and 86 outside Japan. For business activities, there are eleven business units, as indicated on the next page, with total revenues of about 9 trillion yen. The Group employs about 360,000 employees.



## Economic Performance

### As of March 31, 2010

Common Stock	408,810 million yen
Number of employees (unconsolidated basis)	31,065
Number of employees (consolidated basis)	359,746
Number of consolidated subsidiaries	900
	(Japan: 365, outside Japan: 535)
Number of equity-method affiliates	157
	(Japan: 71, outside Japan: 86)

### Period: Fiscal year ending March 31, 2010

(consolidated basis)

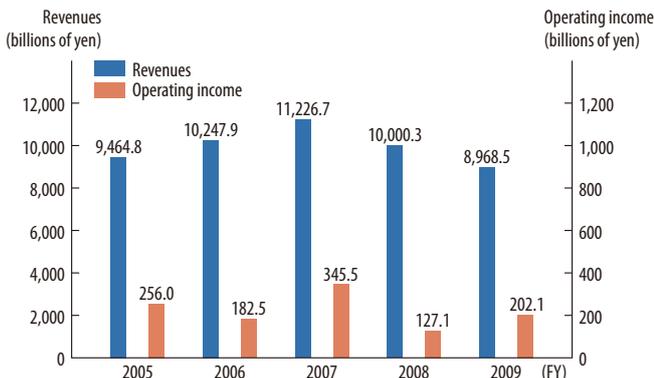
Revenues	8,968.5 billion yen
	(90% compared with the previous year)
Operating income	202.1 billion yen
	(159% compared with the previous year)
Capital investment	546.3 billion yen
	(69% compared with the previous year)
R&D expenditures	372.4 billion yen
	(89% compared with the previous year)
Overseas output as a percentage of consolidated net sales	24%

See Web site for economic performance reports.

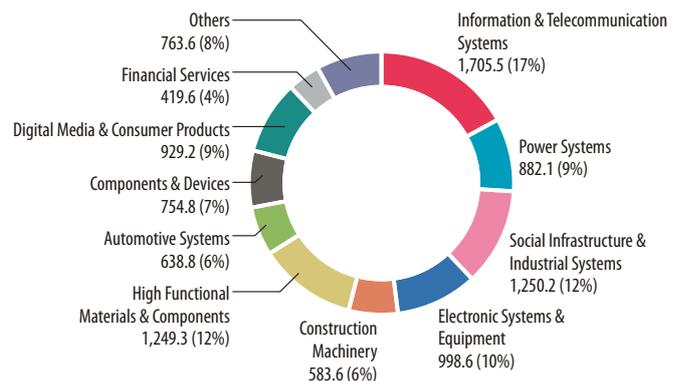
<http://www.hitachi.com/IR-e/>

## Financial Results (consolidated basis)

### Revenues and Operating Income



### Revenues by Industry Segment in Fiscal 2009 (billions of yen)



Total Sales by Industry: 10,175 billion yen  
Consolidated Net Sales: 8,968 billion yen

## Major Fields of Business and Products

<p><b>Information &amp; Telecommunication Systems</b></p> <ul style="list-style-type: none"> <li>● Systems integration, outsourcing services, software, disk array subsystems, servers, mainframes, telecommunications equipment, ATMs</li> <li>■ Hitachi-Omron Terminal Solutions, Corp., Hitachi Computer Products (America), Inc., Hitachi Computer Products (Europe) S.A.S., Hitachi Electronics Services Co., Ltd., Hitachi Information &amp; Control Solutions, Ltd., Hitachi Information Systems, Ltd., Hitachi Software Engineering Co., Ltd., Hitachi Systems &amp; Services, Ltd., Hitachi Data Systems Holding Corp. (U.S.A.), Hitachi Information &amp; Telecommunication Systems Global Holding Corporation</li> </ul>	 <p>Large disk array subsystem*</p>
<p><b>Power Systems</b></p> <ul style="list-style-type: none"> <li>● Thermal, nuclear, hydroelectric, and wind power generation systems</li> <li>■ Babcock-Hitachi K.K., Hitachi-GE Nuclear Energy, Ltd., Hitachi Engineering &amp; Services Co., Ltd., Hitachi Power Europe GmbH, Hitachi Power Systems America, Ltd.</li> </ul> <p>Construction of Electric Power Development Company's Ohma Nuclear Power Plant*</p> 	<p><b>Social Infrastructure &amp; Industrial Systems</b></p> <ul style="list-style-type: none"> <li>● Industrial machinery and plants, elevators, escalators, railway vehicles and systems</li> <li>■ Hitachi Industrial Equipment Systems Co., Ltd., Hitachi Elevator (China) Co., Ltd., Hitachi Building Systems Co., Ltd., Hitachi Plant Technologies, Ltd.</li> </ul>  <p>VX series escalator*</p>
<p><b>Electronic Systems &amp; Equipment</b></p> <ul style="list-style-type: none"> <li>● Semiconductor and LCD manufacturing equipment, testing and measurement equipment, medical electronics equipment, power tools, electronic part processing equipment</li> <li>■ Hitachi High-Technologies Corporation, Hitachi Koki Co., Ltd., Hitachi Kokusai Electric Inc., Hitachi Medical Corporation, Hitachi Via Mechanics, Ltd.</li> </ul>  <p>Hitachi High-Technologies' device characterization system</p>	<p><b>Construction Machinery</b></p> <ul style="list-style-type: none"> <li>● Hydraulic excavators, wheel loaders, mining dump trucks</li> <li>■ Hitachi Construction Machinery Co., Ltd.</li> </ul>  <p>Hitachi Construction Machinery's hydraulic excavator</p>
<p><b>High Functional Materials &amp; Components</b></p> <ul style="list-style-type: none"> <li>● Wires and cables, copper products, semiconductor and display-related materials, circuit boards and materials, specialty steels, magnetic materials and components, high-grade casting components and materials</li> <li>■ Hitachi Cable, Ltd., Hitachi Chemical Co., Ltd., Hitachi Metals, Ltd.</li> </ul>  <p>Neodymium-iron-boron permanent magnet NEOMAX®</p>	<p><b>Automotive Systems</b></p> <ul style="list-style-type: none"> <li>● Engine management systems, electric powertrain systems, drive control systems, car information systems</li> <li>■ Clarion Co., Ltd., Hitachi Automotive systems, Ltd., Hitachi Automotive Products (USA), Inc., Hitachi Auto Parts &amp; Service Co., Ltd.</li> </ul>  <p>Hitachi Automotive Systems' inverter for hybrid vehicles</p>
<p><b>Components &amp; Devices</b></p> <ul style="list-style-type: none"> <li>● Hard disk drives, LCDs, information storage media, batteries</li> <li>■ Hitachi Displays, Ltd., Hitachi Maxell, Ltd., Hitachi Display Device (Suzhou) Co., Ltd., Hitachi Global Storage Technologies Netherlands B.V.</li> </ul>  <p>Hitachi Vehicle Energy's lithium-ion battery for plug-in hybrid electric vehicles</p>	<p><b>Digital Media &amp; Consumer Products</b></p> <ul style="list-style-type: none"> <li>● Optical disk drives, flat-panel TVs, LCD projectors, mobile phones, room air conditioners, refrigerators, washing machines, air-conditioning equipment</li> <li>■ Hitachi Appliances, Inc., Hitachi Consumer Electronics Co., Ltd., Hitachi Media Electronics Co., Ltd., Hitachi Consumer Products (Thailand), Ltd., Hitachi Consumer Marketing, Inc., Hitachi-LG Data Storage Korea, Inc.</li> </ul>  <p>FLEXMULTI, Hitachi Appliances' multi-split air-conditioning systems for buildings</p>
<p><b>Financial Services</b></p> <ul style="list-style-type: none"> <li>● Leasing, loan guarantees</li> <li>■ Hitachi Capital Corporation</li> </ul>  <p>Hitachi Capital's multifunctional IC card</p>	<p><b>Others</b></p> <ul style="list-style-type: none"> <li>● General trading, logistics, property management</li> <li>■ Chuo Shoji, Ltd., Hitachi Life, Ltd., Hitachi Transport System, Ltd., Nikkyo Create, Ltd., Hitachi America, Ltd., Hitachi Asia Ltd., Hitachi (China) Ltd., Hitachi Europe Ltd.</li> </ul>  <p>Hitachi Transport System's Keihin Distribution Center, equipped with Hitachi security systems</p>

● Major Products & Services ■ Major Consolidated Subsidiaries (as of March 31, 2010) The products marked with an asterisk (\*) in the table above are those of Hitachi, Ltd.

(Notes) 1. Hitachi, Ltd. separated out the automotive systems segment to form Hitachi Automotive Systems, Ltd. on July 1, 2009.

2. Hitachi Mobile Co., Ltd. changed its name to Hitachi Auto Parts & Service Co., Ltd. as of April 1, 2009.

3. Hitachi, Ltd. separated out the consumer business, mainly digital media-related products such as flat-panel TVs, to form Hitachi Consumer Electronics Co., Ltd. on July 1, 2009.

# HITACHI

Inspire the Next

## Inquiries:

### Hitachi, Ltd.

CSR Promotion Department, Corporate Brand & Communications Division  
(For inquiries on this report or CSR activities overall)

1-6-6 Marunouchi, Chiyoda-ku, Tokyo, 100-8280, Japan

Tel: +81-3-3258-1111 Fax: +81-3-4564-1454 <http://www.hitachi.com/csr/>

Environmental Strategy Office (For inquiries on environmental activities)

1-6-1 Marunouchi, Chiyoda-ku, Tokyo, 100-8220, Japan

Tel: +81-3-3258-1111 Fax: +81-3-4235-5835 <http://www.hitachi.com/environment/>

**On the cover:** The cover photo is from Moanalua Garden Park (Monkey Pod tree), Oahu Island, Hawaii. This tree has become known as the "Hitachi Tree" through television commercials over many years. It represents the qualities that we like to emphasize at Hitachi—synergy, growth, and strength. (Photo: Tor Johnson; Illustration: Atsushi Hara)



Printed using FSC-approved paper containing raw materials from properly managed forests certified by the FSC (Forest Stewardship Council)



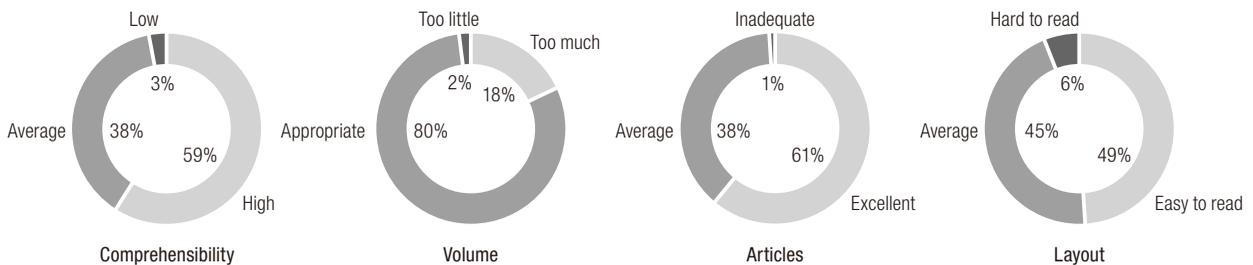
Printed with 100% vegetable oil ink containing no VOCs (volatile organic compounds)

What were your impressions when reading the report on the Hitachi Group's CSR activities, *Hitachi Group Corporate Sustainability Report 2010 Digest*? Please answer the questionnaire on the other side of this page. We consider readers' opinions very important and want to ensure that this feedback is reflected in our various CSR activities.

Contact:  
CSR Promotion Department  
Corporate Brand & Communications Division  
 Hitachi, Ltd.  
1-6-6 Marunouchi, Chiyoda-ku, Tokyo 100-8280 Japan  
Tel: +81-3-3258-1111 Fax: +81-3-4564-1454  
<http://www.hitachi.com/csr/>

Results of Responses to Questionnaire on *Hitachi Group CSR Report 2009 Digest* (Total respondents: 74)

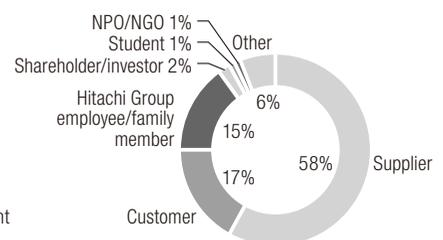
CSR Report 2009



CSR Activities



Breakdown of Responses



Main Feedback and Our Responses

Encouragement

- "Hitachi demonstrated that it is tackling environmental issues from a long-term perspective in its business, notably by suppressing CO<sub>2</sub> emissions while treating wastewater."

Suggestions

- "I'd like Hitachi to present the efforts it is making through its technologies and businesses."
- "The report would be better if there were tabs to make it easier to find the pages I was looking for, as well as the layout of material according to topics to make it easier to read."
- "I'd like more detail on female employment and working conditions, as well as diversity, especially information on hiring foreign nationals and people with disabilities in Japan."

Improvements Made in Response

- The 2010 edition contains our activities to resolve community issues through socially innovative businesses, efforts to address poverty, the environment, and other Millennium Development Goals of the United Nations, and CSR initiatives from our core global businesses.
- We have made the design more readable by replacing stakeholder-specific sections with those presenting key social issues.
- We augmented diversity disclosure with information on measures we are taking outside Japan as well as employing people with disabilities in Japan.

Please answer the questionnaire overleaf

